

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete If Known</b>			
		Applicati n Number	10/663,577		
		Filing Dat	September 16, 2003		
		First Named Inventor	Robert G. Dennis		
		Group Art Unit	Unknown		
Examiner Name	Unknown				
Sheet	1	of	4	Attorney Docket Number	UOM 0294 PUS

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TMG		L.W. Stevenson et al., "The Impending Crisis Awaiting Cardiac Transplantation", Circulation, Vol. 89, No. 1, January 1994, pp. 450-457	
		R.E. Akins et al., "Cardiac Organogenesis in vitro: Reestablishment of Three-Dimensional Tissue Architecture by Dissociated Neonatal Rat Ventricular Cells", Tissue Engineering, Vol. 5, No. 2, 1999, pp. 103-118	
		M. Muthuchamy et al., "Developmental Analysis of Tropomyosin Gene Expression in Embryonic Stem Cells and Mouse Embryos", Molecular and Cellular Biology, June 1993, Vol. 13, No. 6, pp. 3311-3323	
		I. Harary and B. Farley, "In Vitro Studies On Single Beating Rat Heart Cells", Experimental Cell Research 29, 1963, pp. 451-465	
		T. Eschenhagen et al., "Three-dimensional reconstitution of embryonic cardiomyocytes in a collagen matrix: a new heart muscle model system", The FASEB Journal, Vol. 11, July 1997, pp. 683-694	
		L. Saggin et al., "Troponin T Switching in the Developing Rat Heart", The Journal of Biological Chemistry, Vol. 263, No. 34, December 5, 1988, pp. 18488-18492	
		P. Anderson and A. Oakeley, "Immunological Identification of Five Troponin T Isoforms Reveals an Elaborate Maturational Troponin T Profile in Rabbit Myocardium", Circulation Research, Vol. 65, No. 4, October 1989, pp. 1087-1093	
		L. Gao et al., "Differential Expression of TnI and TnT Isoforms in Rabbit Heart during the Perinatal Period and during Cardiovascular Stress", J. Mol. Cell. Cardiol. 27, 1995, pp. 541-550	
		W. Zimmermann et al., "Cardiac Grafting of Engineered Heart Tissue in Syngenic Rats", Circulation Research, September 24, 2002, pp. I-151 - I-157,	
TMG		W. Zimmermann et al., "Tissue Engineering of a Differentiated Cardiac Muscle Construct", Circulation Research, February 8, 2002, pp. 223-230	

Examiner Signature		Date Considered	2/23/06
--------------------	--	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (10-96) [reproduced]

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>Substitute for Form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete If Known</b>	
				Applicati n Number	10/633,577
				Filing Date	September 16, 2003
				First Named Inventor	Robert G. Dennis
				Group Art Unit	Unknown
				Examiner Name	Unknown
Sheet	2	of	4	Attorney Docket Number UOM 0294 PUS	
<b>OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
TMG		T. Shimizu et al., "Two-Dimensional Manipulation of Cardiac Myocyte Sheets Utilizing Temperature-Responsive Culture Dishes Augments the Pulsatile Amplitude", Tissue Engineering, Vol. 7, No. 2, 2001, pp. 141-151			
		T. Shimizu et al., "Electrically communicating three-dimensional cardiac tissue mimic fabricated by layered cultured cardiomyocyte sheets", Journal of Biomedical Materials Research 60, pp. 110-117, 2002			
		T. Sakai et al., "The Fate Of A Tissue-Engineered Cardiac Graft In The Right Ventricular Outflow Tract Of The Rat", The Journal of Thoracic and Cardiovascular Surgery, Vol. 121, No. 5, May 2001, pp. 932-942			
		M. Papadaki et al., "Tissue Engineering Of Functional Cardiac Muscle: Molecular, Structural, and Electrophysiological Studies", Am. J. Physiol Heart Circ. Physiol 280, 2001, pp. H168-H178			
		T. McDevitt et al., "In vitro generation of differentiated cardiac myofibers on micropatterned laminin surfaces", Journal of Biomedical Materials Research 60, 2002, pp. 472-479			
		W. Liu et al., "Developmental changes of Ca <sup>2+</sup> handling in mouse ventricular cells from early embryo to adulthood", Life Sciences 71, 2002, pp. 1279-1292			
		J. Leor et al., "Bioengineered Cardiac Grafts, A New Approach To Repair The Infarcted Myocardium?", Circulation, November 7, 2000, pp. III-56 - III-61			
✓		P. Kosnik et al., "Functional Development of Engineered Skeletal Muscle From Adult And Neonatal Rats", Tissue Engineering, Vol. 7, November 5, 2001, pp. 573-584			
TMG		T. Kofidis et al., "In vitro engineering of heart muscle: Artificial Myocardial tissue", The Journal of Thoracic and Cardiovascular Surgery, Vol. 124, No. 1, pp. 63-69			

Examiner Signature		Date Considered	2/28/06
-----------------------	--	--------------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.



<b>Substitute for Form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Applicati n Number	10/663,577
				Filing Date	September 16, 2003
				First Named Inventor	Robert G. Dennis
				Group Art Unit	Unknown
Examiner Name	Unknown				
Sheet	3	of	4	Attorney Docket Number	UOM 0294 PUS

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TMG		T. Kofidis et al., "A novel bioartificial myocardial tissue and its prospective use in cardiac surgery", European Journal of Cardio-thoracic Surgery, 22, 2002, pp. 238-243	
		A. Kadner et al., "Human Umbilical Cord Cells: A New Cell Source for Cardiovascular Tissue Engineering", Annals of Thoracic Surgery 74, 2002, pp. S1422-S1428	
		R. Dennis and P. Kosnik, "Excitability and Isometric Contractile Properties of Mammalian Skeletal Muscle Constructs Engineered In Vitro", In Vitro Cell. Dev. Biol., May 2000, pp. 327-335	
		R. Dennis et al., "Excitability And Contractility Of Skeletal Muscle Engineered From Primary Cultures And Cell Lines", Am. J. Physiol Cell Physiol, 2001, C288-C295	
		R. Carrier et al., "Cardiac Tissue Engineering: Cell Seeding, Cultivation Parameters, and Tissue Construct Characterization", Biotechnology and Bioengineering, Vol. 64, No. 5, September 5, 1999, pp. 580-589	
		R. Akins, "Can Tissue Engineering Mend Broken Hearts?", Circulation Research, February 8, 2002, pp. 120-122	
		P. Akhyari et al., "Mechanical Stretch Regimen Enhances the Formation of Bioengineered Autologous Cardiac Muscle Grafts", Circulation, September 24, 2002, pp. I-137 - I-142	
		VANDENBURGH et al., Skeletal Muscle Growth is Stimulated by Intermittent Stretch-Relaxation in Tissue Culture, American Psych. Society, 1989, pp. C674-682	
		VANDENBURGH, A Computerized Mechanical Cell Stimulator for Tissue Culture Effects on Skeletal Muscle Organogenesis, In Vitro Cellular & Developmental Biology, Vol. 24, No. 7, July 1988, pp. 609-619	
TMG		VANDENBURGH et al., Longitudinal Growth of Skeletal Myotubes in Vitro in a New Horizontal Mechanical Cell Stimulator, In Vitro Cell Dev. Bio., Vol. 25, No. 7, July 1989, pp. 607-616	

Examiner Signature		Date Considered	2/23/06
--------------------	--	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

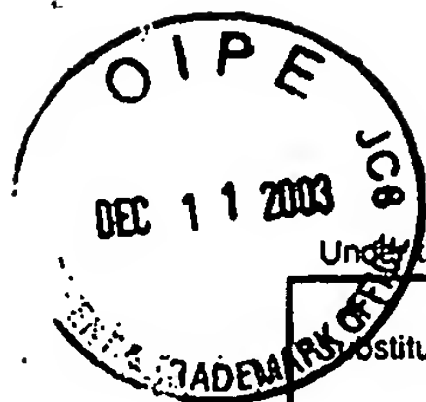


<b>Substitute for Form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)	<b>Complete if Known</b>	
	Applicati n Number	10/663,577
	Filing Date	September 16, 2003
	First Named Inventor	Robert G. Dennis
	Group Art Unit	Unknown
	Examiner Name	Unknown
Sheet 4 of 4	Attorney Docket Number	UOM 294 PUS

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
TMG		VANDENBURGH et al., Computer-Aided Mechanogenesis of Skeletal Muscle Organs from Single Cells In Vitro, The FASEB Journal, Vol. 5, October 1991, pp. 2860-2867	
TMG		VANDENBURGH et al., Tissue-Engineered Skeletal Muscle Organoids for Reversible Gene Therapy, Humane Gene Therapy, November 1996, pp. 2195-2200	
TMG		SHANSKY et al., Letter to the Editor: A Simplified Method for Tissue Engineering Skeletal Muscle Organoids In Vitro, In Vitro Cell. Dev. Biol., October 1997, pp. 659-661	

Examiner Signature		Date Considered	2/28/06
--------------------	--	-----------------	---------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.  
<sup>2</sup>Unique citation designation number. <sup>3</sup>Applicant is to place a check mark here if English language Translation is attached.



<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			<b>Complete if Known</b>		
			Application Number	10/663,577	
			Filing Date	September 16, 2003	
			First Named Inventor	Robert G. Dennis	
			Group Art Unit	Unknown	
			Examiner Name	Unknown	
Sheet	1	of	1	Attorney Docket Number	UOM 0294 PUS

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. PATENT DOCUMENT		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
TMG		4,605,623		Malette et al.	08/12/1986	
		4,642,292		Reid et al.	02/1987	
		4,801,299		Brendel et al.	01/1989	
		4,940,853		Vandenburgh	07/10/1990	
		5,153,136		Vandenburgh	10/06/1992	
		5,443,950		Naughton et al.	08/22/1995	
		5,618,718		Auger et al.	04/08/1997	
		5,756,350		Lee et al.	05/26/1998	
		6,114,164		Dennis et al.	09/05/2000	
		6,207,451		Dennis et al.	03/2001	
		6,303,286		Dennis et al.	10/16/2001	
TMG		6,448,076		Dennis et al.	09/10/2002	

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	2/23/04
-----------------------	--	--------------------	---------

<sup>1</sup> EXAMINER: Initial (if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.